

**In the Claims:**

Claims 1 to 14 (Canceled).

15. (Currently Amended) **An ~~isolated~~ A** polynucleotide comprising a nucleotide sequence that encodes a metal ion affinity peptide **having a formula of** according to ~~claim 4~~

**(His-Asn)<sub>n</sub>, (SEQ ID NO:22) where n=3 to 10.**

16. (Currently Amended) The **~~isolated~~** polynucleotide according to claim 15, wherein the polynucleotide comprises a nucleotide sequence that encodes a fusion protein comprising a polypeptide fused at its amino- or carboxy-terminus to the metal ion affinity peptide.

17. (Original) A recombinant vector comprising a polynucleotide according to claim 15.

18. (Original) A recombinant host cell comprising a recombinant vector according to claim 17.

19. (Original) The recombinant host cell according to claim 18, wherein said cell is a prokaryotic cell.

20. (Original) The recombinant host cell according to claim 18, wherein said cell is a eukaryotic cell.

Claims 21 to 25 (Canceled).

26. (Original) A kit for purifying a protein, comprising:  
a) a recombinant vector according to claim 17; and  
b) a metal ion affinity resin.

27. (Original) The kit according to claim 26, further comprising:  
an extraction buffer;  
a wash buffer; and  
an elution buffer.
28. (Original) The kit according to claim 27, further comprising a column.

Please add the following new claims:

29. (New) The polynucleotide according to claim 15, wherein  $n=6$ .
30. (New) A polynucleotide comprising a nucleotide sequence that encodes a metal ion affinity peptide having the amino acid sequence  $\text{NH}_2\text{-His-Leu-Ile-His-Asn-Val-His-Lys-Glu-Glu-His-Ala-His-Ala-His-Asn-COOH}$  (SEQ ID NO: 1).
31. (New) The polynucleotide according to claim 30, wherein the polynucleotide comprises a nucleotide sequence that encodes a fusion protein comprising a polypeptide fused at its amino- or carboxy-terminus to the metal ion affinity peptide.
32. (New) A recombinant vector comprising a polynucleotide according to claim 30.
33. (New) A recombinant host cell comprising a recombinant vector according to claim 30.
34. (New) The recombinant host cell according to claim 33, wherein said cell is a prokaryotic cell.
35. (New) The recombinant host cell according to claim 33, wherein said cell is a eukaryotic cell.
36. (New) A kit for purifying a protein, comprising:  
a) a recombinant vector according to claim 32; and

b) a metal ion affinity resin.

37. (New) The kit according to claim 36, further comprising:  
an extraction buffer;  
a wash buffer; and  
an elution buffer.
38. (New) The kit according to claim 37, further comprising a column.

**In the Sequence Listing:**

Please replace all previously provided sequence listings with the enclosed sequence listing.